



setting signal values for modifying at least one parameter "vibration", "light", ["depth"] "dark", or "medium gradation" at the engraving amplifier;

5 with the signal values, engraving test cells for predetermined desired tone values, and measuring their geometric actual dimensions;

calculating difference values from the actual dimensions and the desired dimensions of the cells upon consideration of the transmission functions;

10 correcting the signal values by adding the difference values;

15 the steps of setting the signal values through correcting the signal values are repeated using the corrected signal values, until the actual dimensions of the cells are at least within a tolerance range about the desired dimensions;

to shorten calibration time,

20 in each sequence of the steps from setting the signal values through correcting the signal values, comparing the actual dimensions of the cells to the desired dimensions;

if the actual dimensions are outside the tolerance range, recalculating the transmission functions;

25 computing new difference values upon consideration of the recalculated transmission functions; and

correcting the signal values using the new difference values.

SECRET  
B1  
C1

12. (Amended) The method of claim 10 wherein the dimension of a cell is a cross-diagonal, a longitudinal diagonal and [penetration depth] channel width.

B2

BC1

5 13. (Amended) The method of claim 10 wherein the difference value of the vibration signal value for the parameter "vibration" is computed from a difference between the actual dimensions and the desired dimensions of a test cell representing a tone value domain ["depth"] "dark"

10 15. (Amended) The method of claim 10 wherein a fictional cross-diagonal for a cell representing the tone value domain ["depth"] "dark" is determined as a sum of the measured cross-diagonals and a cross-diagonal variation that occurs owing to the variation of the vibration signal;

B3

BC1

15 the deviation of the fictional cross-diagonals from the desired cross-diagonals is determined; and  
20 the difference value of the engraving signal value for the parameter ["depth"] "dark" is computed from the determined deviation and the transmission function, which reproduces a relationship between a variation of the engraving signal value for the parameter ["depth"] "dark" and a resulting variation of the cross-diagonals of a test cell representing the tone value domain ["depth"]  
25 "dark".